



AVOX Systems

SERVICE INFORMATION LETTER

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OXYGEN - ATA CHAPTER 35

VENDOR CODE: 53655

TEST DATA SHEET FOR P/N 895 Series Cylinder and Regulator Assembly

1. BACKGROUND

- A. Component Maintenance Manual (CMM) 35-28-95 specifies the tests that must be passed in order to return a unit to service. This SIL provides a standardized form on which to record the results of the required functional tests. This form will be incorporated into the CMM at the next revision.
- B. You are authorized to copy the form on pages 2 thru 5. If you copy the form on pages 2 thru 5, you must copy all of the form.
- C. Use this form only for the AVOX Systems components printed on the form. Do not use this form for any other AVOX Systems components or for any components of another company.

2. EFFECTIVITY

- A. Aircraft
The Test Data Sheets on pages 2 thru 5 can be used for all units whether removed from any aircraft or from spares inventory.
- B. This SIL applies to all Cylinder and Regulator Assemblies 895 Series.

3. MATERIALS

The only material required by this SIL is the Test Data Sheet on pages 2 thru 5.

4. ACCOMPLISHMENT OF SIL

- A. Make complete copies of the Test Data Sheet on pages 2 thru 5.
- B. Use a copy of the Test Data Sheet from pages 2 thru 5 to record the results of tests whenever a P/N 895 Series Cylinder and Regulator Assembly is tested.

5. TO CONTACT AVOX SYSTEMS:

Use the contact information below to get a copy of a CMM or the revision status of a publication. Give the AVOX Systems part number and the aircraft model when you request a CMM copy.

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CMM 35-28-95
TEST DATA SHEET A
895 Series Cylinder and Regulator Assembly

Tested by: _____

Date: _____

Part Number: _____

Inspected by: _____

Date: _____

Serial Number: _____

Refer to the **CHECK** section and Paragraphs 5 and 6 in the **TESTING AND FAULT ISOLATION** and paragraph 11 in the **ASSEMBLY** sections of CMM 35-28-95.

1. Visual Inspection

Refer to the **CHECK** section for cylinder service life and the hydrostatic test frequency requirements. Check the condition of cylinder surfaces for heat or fire damage, dents, gouges, cracks, distortion, or thread damage. Verify that any parts that are no longer serviceable have been replaced.

☐ FAIL ☐ PASS

5. Regulator Test Procedures**B. Regulator Flow Test**

Perform a flow test.

Regulator Series	Regulator Item No.	Inlet Pressure psig (MPa)		Flow lpm	Allowable Outlet Pressure psig (MPa)		
		Low	High				
803213	-10E, -10F, -10Q	200 (1.38)	1850 (12.8)	2-70	42-68 (0.29-0.47)	☐ FAIL	☐ PASS
		200 (1.38)	1850 (12.8)	0	80 (0.55)	☐ FAIL	☐ PASS
	-10 thru -10D, -10G thru -10P	250 (1.72)	1850 (12.8)	5-200	55-80 (0.38-0.55)	☐ FAIL	☐ PASS
		250 (1.72)	1850 (12.8)	0	88 (0.61)	☐ FAIL	☐ PASS
803214	-20, -20A, -20C, -20D, -20E	250 (1.72)	1850 (12.8)	5-200	55-80 (0.38-0.55)	☐ FAIL	☐ PASS
		250 (1.72)	1850 (12.8)	0	88 (0.61)	☐ FAIL	☐ PASS
	-20B	250 (1.72)	1850 (12.8)	2-70	42-68 (0.29-0.47)	☐ FAIL	☐ PASS
		250 (1.72)	1850 (12.8)	0	80 (0.55)	☐ FAIL	☐ PASS
803215	-30 thru -30B	250 (1.72)	1850 (12.8)	5-200	55-80 (0.38-0.55)	☐ FAIL	☐ PASS
		250 (1.72)	1850 (12.8)	0	85 (0.59)	☐ FAIL	☐ PASS
803216	-40 thru -40C (with altitude compensated regulator removed)	250 (1.72)	1850 (12.8)	10-100	100-135 (0.69-0.93)	☐ FAIL	☐ PASS
		250 (1.72)	1850 (12.8)	0	140 (0.97)	☐ FAIL	☐ PASS
805982	-50	250 (1.72)	1850 (12.8)	5-200	55-80 (0.38-0.55)	☐ FAIL	☐ PASS
		250 (1.72)	1850 (12.8)	0	88 (0.61)	☐ FAIL	☐ PASS

5. Regulator Test Procedures**C. Vent Valve Test**

Perform a vent valve test.

Outlet Pressure decreases to
0 psig (0 Mpa) within 30 seconds

☐ FAIL ☐ PASS

NOTE: FLOWS ARE GIVEN FOR OXYGEN TEST GAS @ NTPD.
 APPLY THE APPROPRIATE CORRECTION FACTOR IF ANOTHER
 MEDIUM IS USED.



CMM 35-28-95
TEST DATA SHEET B
895 Series Cylinder and Regulator Assembly

Tested by: _____

Date: _____

Part Number: _____

Inspected by: _____

Date: _____

Serial Number: _____

5. Regulator Test Procedures**D. Actuation Force Test**

Perform a cam lever actuation force test.

Regulator Series	Regulator Item No.	Actuation Force lbs (N) Max.		Cylinder Pressure			
		"ON"	"OFF"	2000 psig (13.7 MPa)		200 psig (1.38 MPa)	
803213	-10A, -10C, -10J	3 (13.4)	3 (13.4)	☐ FAIL	☐ PASS	☐ FAIL	☐ PASS
803213	-10, -10D, -10E, -10G, -10L, -10N, -10P, -10Q	6 (26.7)	6 (26.7)	☐ FAIL	☐ PASS	☐ FAIL	☐ PASS
803214 803215 803216	-20 thru -20D, -30, -30A, -30B, -40 thru -40C	3 (13.4)	6 (26.7)	☐ FAIL	☐ PASS	☐ FAIL	☐ PASS
805982	-50	6 (26.7)	6 (26.7)	☐ FAIL	☐ PASS	☐ FAIL	☐ PASS

5. Regulator Test Procedures**E. Hand-Knob Actuation Torque Test**

Perform a hand-knob actuation torque test.

Actuation Torque full "ON" or "OFF" in•lbs (N•m) Max.	2000 psig (13.79 MPa)	200 psig (1.38 MPa)
4.0 (0.45)	☐ FAIL ☐ PASS	☐ FAIL ☐ PASS

5. Regulator Test Procedures**F. Internal Leakage Test**

Perform an internal leakage test.

Inlet Pressure psig (MPa)	1 cc/min. Allowed Max.
1850 (12.76)	☐ FAIL ☐ PASS

5. Regulator Test Procedures**F. External Leakage Test**

Perform an external leakage test.

Inlet Pressure psig (MPa)	10 cc/min. Allowed Max.
1850 (12.76)	☐ FAIL ☐ PASS
200 (1.38)	☐ FAIL ☐ PASS

6. Component Test Procedures**A. Relief Valve Pressure Test**

Perform a relief valve pressure test.

Regulator Series	Regulator Item No.	Relief Valve psig (MPa)		Reseating Pressure	
		Cracking Pressure	Free Flow Pressure		
803213	-10 thru -10Q	90 (0.62)	135 (0.93)	90 (0.62)	☐ FAIL ☐ PASS
803214	-20 thru -20E	90 (0.62)	135 (0.93)	90 (0.62)	☐ FAIL ☐ PASS
803215	-30 thru -30B	90 (0.62)	135 (0.93)	90 (0.62)	☐ FAIL ☐ PASS
803216	-40 thru -40C	160 (1.10)	200 (1.38)	160 (1.10)	☐ FAIL ☐ PASS
805982	-50	90 (0.62)	135 (0.93)	90 (0.62)	☐ FAIL ☐ PASS

NOTE: FLOWS ARE GIVEN FOR OXYGEN TEST GAS @ NTPD.
 APPLY THE APPROPRIATE CORRECTION FACTOR IF ANOTHER
 MEDIUM IS USED.



**CMM 35-28-95
TEST DATA SHEET C
895 Series Cylinder and Regulator Assembly**

Tested by: _____

Date: _____

Part Number: _____

Inspected by: _____

Date: _____

Serial Number: _____

6. Component Test Procedures**B. Gauge Accuracy Test**

Perform a gauge accuracy test.

Inlet Pressure psig (MPa)	Observed Gauge Pressure Actual ± 100 psig (0.689 MPa)
1800 (12.41)	☐ FAIL ☐ PASS

6. Component Test Procedures**C. Altitude Compensated Regulator Test****(1) Internal Leakage Test**

Perform an internal leakage test.

Inlet Pressure psig (MPa)	After 5 min. No Increase in Outlet Pressure
150 (1.03)	☐ FAIL ☐ PASS

(2) External Leakage Test

Perform an external leakage test.

Pressure Applied to Inlet psig (MPa)	Pressure Applied to Outlet psig (MPa)	0 Leakage Allowed
150 (1.03)	80 (0.55)	☐ FAIL ☐ PASS

(3) Flow/Pressure Test

Perform a flow/pressure test.

Altitude Setting feet (meters)	Outlet Flow lpm		Outlet Pressure psig (MPa)		
	Low	High	Low	High	
1,000 (300)	12.0	12.0	2.6 (0.02)	12.1 (0.08)	☐ FAIL ☐ PASS
8,000 (2,440)	15.0	15.0	13.2 (0.09)	21.2 (0.15)	☐ FAIL ☐ PASS
12,500 (3,810)	18.0	24.0	23.1 (0.16)	30.6 (0.21)	☐ FAIL ☐ PASS
20,000 (6,100)	40.0	48.0	42.5 (0.29)	52.0 (0.36)	☐ FAIL ☐ PASS
35,000 (10,670)	76.0	85.0	69.3 (0.48)	86.3 (0.60)	☐ FAIL ☐ PASS

(4) Full Flow Test

Perform a full flow test.

Altitude Setting feet (meters)	Inlet Pressure psig (MPa)	100 lpm Minimum
35,000 (10,670)	100 (0.69)	☐ FAIL ☐ PASS

6. Component Test Procedures**D. Full Flow (Non-Metered) Outlet Assembly Test**

Perform a full flow (non metered) outlet assembly test.

Regulated Pressure psig (MPa)	Outlet Assembly/Mating Connector	
125 (0.862)	0 Leakage Allowed	☐ FAIL ☐ PASS
55 ± 2 (0.38 ± 0.014)	Connector Freely Disengages/Engages Repeat 5 Times	☐ FAIL ☐ PASS

NOTE: FLOWS ARE GIVEN FOR OXYGEN TEST GAS @ NTPD.
APPLY THE APPROPRIATE CORRECTION FACTOR IF ANOTHER
MEDIUM IS USED.



CMM 35-28-95
TEST DATA SHEET D
895 Series Cylinder and Regulator Assembly

Tested by: _____

Date: _____

Part Number: _____

Inspected by: _____

Date: _____

Serial Number: _____

11. Cylinder and Regulator Assembly (CRA) Test Procedure**C. Leakage Test**

Perform a leakage test.

Inlet Pressure psig (MPa)	0 Leakage Allowed on Mating Threads Between Regulator Assembly and Composite Cylinder
1850 (12.8)	☐ FAIL ☐ PASS

11. Cylinder and Regulator Assembly (CRA) Test Procedure**C. Latent Leakage Test**

After a 48 hour hold period, repeat the leakage test.

Inlet Pressure psig (MPa)	0 Leakage Allowed on Mating Threads Between Regulator Assembly and Composite Cylinder
1850 (12.8)	☐ FAIL ☐ PASS

NOTE: FLOWS ARE GIVEN FOR OXYGEN TEST GAS @ NTPD.
APPLY THE APPROPRIATE CORRECTION FACTOR IF ANOTHER
MEDIUM IS USED.